PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing
(day/month/year)   see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference	FOR FURTHER ACTION
see form PCT/ISA/220	See paragraph 2 below

International application No.	International filing date (day/month/year)	Priority date (day/month/year)
PCT/JP2004/019488	20.12.2004	16.01.2004

International Patent Classification (IPC) or both national classification and IPC
G11B20/00, G06F1/00, H04L9/32

Applicant
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

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1.   This opinion contains indications relating to the following items:

   ☒ Box No. I   Basis of the opinion
   ☐ Box No. II   Priority
   ☐ Box No. III   Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   ☐ Box No. IV   Lack of unity of invention
   ☒ Box No. V   Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
   ☐ Box No. VI   Certain documents cited
   ☒ Box No. VII   Certain defects in the international application
   ☒ Box No. VIII   Certain observations on the international application

2.   **FURTHER ACTION**

   If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

   If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

   For further options, see Form PCT/ISA/220.

3.   For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:	Authorized Officer
European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Kopp, K Telephone No. +49 89 2399-7833

ATTACHMENT "E"

iAP20 Rec'd PCT/PTO 27 APR 2006

Box No. I   Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

   ☐ This opinion has been established on the basis of a translation from the original language into the following language   , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

   a. type of material:

      ☐ a sequence listing

      ☐ table(s) related to the sequence listing

   b. format of material:

      ☐ in written format

      ☐ in computer readable form

   c. time of filing/furnishing:

      ☐ contained in the international application as filed.

      ☐ filed together with the international application in computer readable form.

      ☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

Box No. V   Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	3
	No:	Claims	1,2,4-9
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-9
Industrial applicability (IA)	Yes:	Claims	1-9
	No:	Claims	

2. Citations and explanations

   see separate sheet

Box No. VII   Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

   see separate sheet

Box No. VIII   Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

   see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1.   The following documents are referred to in the communication:

D1:   US-A-5 949 877 (TRAW ET AL) 7 September 1999 (1999-09-07)
D2:   WO 03/096339 A (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD) 20 November 2003 (2003-11-20)

2.   Claim 6 lacks of novelty (Articles 33(2) PCT).

Document D1, which is considered to represent the most relevant state of the art for claim 6, discloses according to the subject-matter of claim 6 insofar the subject-matter is clear:

an unauthorized terminal detection method for detecting an unauthorized terminal in terminals that accessed the authentication server via a network, comprising:

- receiving, from the terminal, authentication data generated based on a terminal key that is previously given to the terminal and a terminal ID that is identification information assigned to said each manufactured terminal (column 6, lines 31-36 in combination with column 7, lines 7-10);
- verifying authenticity of the terminal key using the received authentication data (column 7, lines 15-18);
- trying to search the received terminal ID based on the held predetermined terminal information concerning a plurality of terminal (column 7, lines 28-32); and
- determining that a terminal is an unauthorized terminal in the case where the authenticity of the terminal key is verified in the verifying, but a terminal ID different from the received terminal ID is detected (column 7, lines 28-32).

3.   The document D2 is also very pertinent with regard to the subject-matter of claim 6, because in D2 a problem is solved similar to that of the present application by checking terminal ID and driver ID, i.e. detecting an unauthorized terminal by

checking the terminal key and the terminal ID.

4.   The above finding also applies to independent claims 1 and 8, which correspond to independent claim 6. Therefore, claims 1 and 8 lack novelty (Article 33(2) PCT).

5.   Claim 5 differs from claim 1 in that, that the subject-matter of claim 5, an unauthorized terminal detection system is comprising an authentication server as claimed in claim 1 and in addition comprising a terminal, wherein the terminal includes

- a terminal information sending unit operable to send, to the authentication server, authentication data generated based on a terminal key that is previously given to the terminal and a terminal ID that is identification information assigned to said each manufactured terminal.

Therefore, the subject-matter of claim 6 lacks novelty (Article 33(2) PCT).

6.   If novelty were disputable based on minor differences of interpretation it is pointed out that the subject-matter of independent claims 1, 5, 6, and 8 does not involve an inventive step.

7.   The additional features of the dependent claims 2-4, 7, 9 do not add anything new or inventive to the independent claims to which they refer, because these features are either known from the above-mentioned prior art D1 (e.g. the terminal key is a public certificate in a public key encryption method; receiving a terminal ID from an operator) or are common measures (e.g. judges that the terminal is an unauthorized terminal in the case where the digital content that is accessed exceeding the access limit).

Re Item VII
Certain defects in the international application

1.   The features of the claims are not provided with reference signs place in parentheses (Rule 6.2(b) PCT).

2. Independent claims 1, 5, 6, and 8 are not in the two-part form in accordance with Rule 6.3(b) PCT, with those features known in combination from the prior art document D1 being placed in the preamble (Rule 6.3(b)(I) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).

3. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1 and D2 is not mentioned in the description, nor are these documents identified therein.

4. The phrase "is incorporated herein by reference in its entirety" on page 5, line 32 - page 6, line 1 should be deleted as the application should be self-contained; such referenced documents are not regarded as part of the disclosure unless they contain matter essential to the invention, in which case the subject-matter in question would have to incorporated into the description. This is however not the case here.

5. The JP applications cited on page 1, lines 29-30 and on page 5, line 31 should in principle been identified by their publication number and date, however, it seems that these documents are not yet published at the time of establishing this report.

6. The vague and imprecise statements
    *   "...and the like" in the description on page 3, lines 9;
    *   "....that many modifications are possible in the exemplary embodiment without materially departing from the novel teachings and advantages of this invention. Accordingly, all such modifications are intended to be included within the scope of the invention." in the description on page 20, lines 18-24;
    imply that the subject-matter for which protection is sought may be different to that defined by the claims, thereby resulting in lack of clarity of the claims

Re Item VIII
Certain observations on the international application

1. The claims do not meet the requirements of Article 6 PCT:

1.1 Apparatus claims 1, 2, 3, 5, and 8 comprise method steps (e.g. detects, verifies,

registers, judges) and are therefore not clear concerning the category.

1.2   An antecedent definition for the expressions
- "the digital content" used in claim 3;
- "the access limit" used in claim 3;

is missing.

1.3   It is unclear if with the expressions
- "an unauthorized terminal", used twice in each of claims 1, 5, 6 and 8;
- "terminals" and "a plurality of terminals" used in each claims 1, 5, 6, and 8;
- "predetermined terminal information" and "terminal information" used in claim 1;
- "a receiving unit" used in claim 2 and " a terminal information receiving unit" used in claim 1;
- "an unregistered terminal ID determination unit" used in claim 2 and "an unauthorized terminal determination unit" in claim 1;
- "the digital content" and "a digital content" used in claim 3;
- "the unauthorized terminal judgement unit" used in claim 3 and " an unauthorized terminal determination unit" used in claim 1;
- "a terminal" used in claim 3 and "a terminal" used in claim 1;
- "a terminal ID used in claim 6 and "a terminal ID" used in claim 7;
- "a terminal ID used in claim 8 and "a terminal ID" used in claim 9;

the same entity is meant or not.

1.4   The authentication server in claim 3 is not defined per SE but also specified in its relationship to a second entity "the terminal" and lacks therefore clarity (Guidelines C-III, 4.8a).

1.5   The wording "a plurality of terminal" used in claims 1 and 6 is unclear. Here, it is assumed, that meant is "a plurality of terminals",

1.6   The wording "try to search" in claim 1 and "trying to search" in claims 6 and 8 lead to doubts about the scope of protection sought for said claims, since it is not clear the received terminal ID is searched based on the held predetermined information or not.